Appl. No.: 10/700,167 Response dated August 14, 2007 Reply to Office Action of May 14, 2007

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

Claim 1 (cancelled).

Claim 2 (currently amended): A metalworking lubricant composition comprising:

- A) at least one lubricating oil; and
- at least one base-catalyzed branched reaction product comprising the following reactants of:
  - a) at least one compound of formula I

$$R^{1}(X)_{3}$$
 (I)

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbo n atoms in the  $\mathbb{R}^1$  group to form an epoxy group, and  $\mathbb{R}^1$  is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

$$R^2X(AO)_nY$$
 (II)

wherein  $R^2$  is a substituted or unsubstituted, saturated or unsaturated, organic group having from 1 to 36 carbon atoms; X is -O-, -S-, or  $-NR^3-$  where  $R^3$  is hydrocarbon or a  $C_1-C_{18}$  alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to

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200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a  $C_1$ - $C_6$  alkyl amino group in place of a terminal -OH group, provided that when Y is mercapto or an amino group or a  $C_1$ - $C_6$  alkyl amino group, n is at least 1;

wherein the mole ratio of the linking compound a) to b) is from 0.1:1 to 5:1wherein the metal working lubricant composition has reduced foaming properties in aqueous and nonaqueous metal working formulations and improved lubricating and extreme pressure properties and, wherein,  $R^2$  is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof; and optionally

 c) a glycidyl ether and/or a glycidyl amine, whereby, when contacted with a metal, the metal is lubricated.

Claim 3 (currently amended): An aqueous electroplating composition comprising:

- A) at least one metal or metalloid <u>and ions thereof</u>; and
- at least one base-catalyzed reaction product comprising the following reactants of:
  - a) at least one compound of formula I

$$R^{1}(X)_{3}$$
 (i)

wherein each X group is a halogen atom or one X group is a halogen atom and two X groups represent an epoxy oxygen atom, which is attached to two adjacent carbon atoms in the R<sup>1</sup> group to form an epoxy group, and R<sup>1</sup> is an alkanetriyl group containing from 3 to 10 carbon atoms; and

b) at least one compound having the formula II

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wherein  $R^2$  is a substituted or unsubstituted, saturated or unsaturated, organic group having from 1 to 36 carbon atoms; X is -O-, -S-, or  $-NR^3-$  where  $R^3$  is hydrogen or a  $C_1-C_{18}$  alkyl group; each AO group is independently an ethyleneoxy, 1,2-propyleneoxy, or 1,2-butyleneoxy group, n is a number from 0 to 200; and Y is hydrogen, or Y can be a mercapto group or an amino group or a  $C_1-C_6$  alkylamino group in place of a terminal -OH group, provided that when Y is mercapto or an amino group, or a  $C_1-C_6$  alkylamino group, n is at least 1:

wherein the mole ratio of component a) to b) is from 0.1:1 to 5:1, and wherein the base catalyzed reaction product is not epoxy functional and provides improved brightening and reduced foaming and, wherein,  $R^2$  is optionally substituted with a member selected from the group consisting of mercaptan functionably, thio functionably, amine functionably, amide functionably, alcohol functionably, silicone functionably, ether functionably, and combinations thereof; and optionally

## c) a glycidyl ether and/or glycidyl amine.

Claim 4 (new): The composition of claim 2 comprising from 0.001% to 10% by weight of the reaction product.

Claim 5 (new): The composition of claim 4 comprising from 0.1% to 3% by weight of the reaction product.

Claim 6 (new): The composition of claim 4 comprising from 1 to 20 mole percent of c) based on the moles of b).

Claim 7 (new): The composition of claim 2 comprising at least one additive selected from the group consisting of viscosity improvers, pour-point depressants, antioxidants, amine

solvents, buffers, nonionic surfactants (other than B), corrosion inhibitors, and coupling

agents.

Claim 8 (new): The composition of claim 2 comprising from 30% to 90% by weight of A.

Claim 9 (new): The composition of claim 3 containing from 0.001% to 5% by weight of the

reaction product

Claim 10 (new): The composition of claim 9 comprising from 0.1% to 3% by weight of the

reaction product.

Claim 11 (new): The composition of claim 3 comprising from about 1 to 20 mole percent of

c) based on the moles of b).

Claim 12 (new): The electroplating composition of claim 3, wherein, the composition is an  $\,$ 

electroplating bath selected from the group consisting of zinc, nickel, copper, chromium, manganese, iron, cobalt, gallium, germanium, arsenic, selenium, ruthenium, rhodium

palladium silver, cadmium, indium, tin, lead, bismuth, mercury, antimony, gold, indium, platinum, brass, bronze, gold alloys, lead-tin, nickel iron, nickel cobalt, nickel-phosphorus,

tin-nickel, tin-zinc, zinc-nickel, zinc cobalt, zinc iron, lead-indium, nickel-manganese, nickel-

tungsten, palladum allovs, silver allovs and zinc-manganese.

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